Marked-up Version of Amended Abstract

[Are effective A method for examining nucleotide sequences of a sample [having multiple test sites based on a method using chemiluminescence, which comprises a step in which includes adding a group of primers [1 consisting] of multiple [primer] species [is added] to a solution containing [a] the sample [2 subjected to examination,] and simultaneously synthesizing [synthesis of] complementary strands [is performed] at each of the multiple regions containing [target] the nucleotide sequences [to be examined]; [a step in which] designing the DNA probes with specific sequences [are designed so that elongation of] elongate the complementary strands [is affected] by the presence or absence of mutations in the [target] nucleotide sequences, wherein the same number of such DNA probes and the [target]nucleotide sequences [is] are used for complementary strand synthesis[, 5-1 and 5-2]; [a step in which the elongation reaction of complementary strands] using the [targets] nucleotide sequences or [the sequence] their complementary sequences [to the targets] as a template to convert [and the following reaction where] pyrophosphate produced during the elongation reaction [is converted] to ATP [and reacted] which then reacts with chemiluminescent substrates to develop luminescence to be detected[are performed in the subcells of the reaction vessel that are compartmentalized for each target; wherein a step in which mutations present in the target nucleotide sequences are detected by detecting the luminescence]. According to the method, sensitivity is greatly increased by amplification of the amount of pyrophosphate produced in synthesis of the complementary strands without amplifying the [copy number of targets] copies of nucleotide sequences.